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**Time to First Antibiotic Dose Measurement in Community-Acquired Pneumonia: Time for a Change**

*To the Editor:*

I read with interest the article by Cheng & Buising titled, “Delayed Administration of Antibiotics and Mortality in Patients With Community-Acquired Pneumonia.” In one Australian hospital, the authors reported an inverse relationship between time to first antibiotic dose and mortality in patients with community-acquired pneumonia: patients who died experienced shorter time to first antibiotic dose (1.5 hours) than survivors (2.9 hours). Their findings stand in sharp contrast to previous studies in Medicare patients where antibiotic delays of 4- or 8-hours were associated with a higher likelihood of death.2,3

The salient question for the frontline emergency physician is: do early antibiotics really matter in community-acquired pneumonia? The authors argue that early antibiotics actually do matter in sick patients (ie, with septic shock) and point to an ICU-based study where delayed antibiotics were associated with dramatically higher mortality rates.4 But in the general population with mild to moderate community-acquired pneumonia: “. . .overinterpretation of small differences in time to first antibiotic dose in which the majority are receiving timely therapy is probably not justified.”

All of this makes sense, but I would go one step further. I propose that we, as emergency physicians, use this evidence to make a change in practice. We need to go back to practicing thoughtful medicine, and do what we did before Centers for Medicare & Medicaid Services announced that time to first antibiotic dose < 4 hours was a care standard (as an aside, now its time to first antibiotic dose < 6 hours which is supported by even less evidence). Wait until a diagnosis of community-acquired pneumonia is made, then give the antibiotics, not the opposite, unless the patient is in shock. And ensure the emergency department is run efficiently so diagnoses can be made in a timely manner (in the authors’ study, >90% received antibiotics within 8 hours).

The bigger question is: why are we still having this discussion? Do we need more evidence demonstrating that in otherwise stable community-acquired pneumonia patients who have been sick for days to weeks that giving antibiotics at hour 3 versus hour 7 doesn’t cause fewer deaths?

My message to the group that continues to support the measurement of time to first antibiotic dose in community-acquired pneumonia: undo the damage. Time to first antibiotic dose in community-acquired pneumonia needs to just go away. The failed promise of this measure to improve community-acquired pneumonia outcomes is only worsened by the continued measurement of a clinically meaningless entity that clearly promotes antibiotic misuse.5,6 In the inaugural words of our new President Barack Obama, now is time for a “. . .new era of responsibility.” This not only applies to government spending, but also how Centers for Medicare & Medicaid Services influences the practice of emergency care.1-6

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**In reply:**

We thank Dr. Pines for his lucid comments. In contrast to the US Joint Commission, the time to first antibiotic dose criterion is not used in Australia as a marker of the quality of care. We further note that in a recent systematic review, the